



P.O. Box 946  
Fredericksburg, VA 22404

SIGMA S-460

## MATERIAL SAFETY DATA SHEET

HMIS/NFPA Health: 0 Fire: 1 Reactivity: 0 PPI: N/A

### SECTION 1: DESCRIPTION

PRODUCT NAME		DOT PROPER SHIPPING NAME	
SIGMA S-460 Synthetic Air Compressor Oil		Not Listed	
(Manufactured for Kaeser by: Royal Purple, Inc.)		DOT HAZARD CLASS	
		Non-Hazardous	
CHEMICAL FAMILY		DATE	BY
Synthetic Lubricants		June 1, 2000	JBW (281-446-1000)

### SECTION 2: INGREDIENTS

COMPONENT	CAS No.	%
Poly Ester Synthetic	68515-49-1	5 to 10%
Poly Alpha Olefin Synthetic	68037-01-4	75 to 80%
Hydrogenated ISO-Paraffin	64742-65-0	10 to 15%
Synthetic Oxidation Inhibitor	68608-77-5	0.5 to 1%
Synthetic Corrosion Inhibitor	55906-42-8	0.5 to 1%
Synthetic Ashless Oxidation Inhibitor	10254-57-6	0.5 to 1%

This product contains no hazardous substance within the definition of OSHA Regulation 29 CFR 1910.1200.

Royal Purple Lubricants certifies that this product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous wastes. This is because product uses, transformations, mixtures, processes, etc. may render the resulting material hazardous.

### SECTION 3: PHYSICAL DATA

Boiling Point °C/°F	>700°F	Pour Point °C/°F	-50°F or lower
Vapor Pressure mm Hg @ 20 °C	Less Than 0.1	Evaporation Rate	Negligible
Vapor Density (Air = 1)	Greater Than Air	Specific Gravity	Greater Than 0.86
Solubility in Water	Negligible	Physical State	Liquid
Appearance	Golden	Odor	Lube Oil

### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point °C/°F	>460°F
Extinguishing Media	Dry Chemical, Foam, CO <sub>2</sub> , Water Fog
Special Fire Fighting Procedures	Positive pressure, self-contained breathing apparatus should be worn.
Unusual Fire and Explosion Hazards	None

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## SECTION 5: REACTIVITY HAZARDS

Stability	Unstable <input type="checkbox"/> Stable <input checked="" type="checkbox"/>	Conditions to avoid	Extreme Heat & Open Flame
Incompatibility (materials to Avoid)	Strong Oxidizers		
Hazardous Decomposition Products	Carbon Monoxide, Hydrogen, Aldehydes, smoke & fumes		
Hazardous Polymerization	May Occur <input type="checkbox"/> Will Not Occur <input checked="" type="checkbox"/>	Conditions to Avoid	

## SECTION 6: HEALTH HAZARDS

1. Acute Overexposure	No significant adverse health effects are expected upon short-term exposure						
2. Chronic Overexposure	Repeated and long time skin contact for persons hypersensitive to petroleum products may cause redness and irritation of eyes and skin.						
Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Program	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	I.A.R.C. Monographs	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	OSHA	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Threshold Limit Value	5mg / m <sup>3</sup> for mineral oils and synthetic lubricants						
Emergency and First Aid Procedures / Primary Routes of Entry							
1. Inhalation	Vaporization is not expected at ambient temperatures, so there should be no problem.						
2. Eyes	Wash with copious quantities of water. If irritation persists, get medical attention. Slightly irritating but does not damage eye tissue.						
3. Skin	Wash with soap and water. Low order of toxicity.						
4. Ingestion	Do not induce vomiting; call physician.		Medical Conditions Aggravated by Exposure	None Known			

## SECTION 7: SPECIAL PROTECTION INFORMATION

Respiratory Protection	None required with adequate ventilation. In enclosed areas, supplied-air may be used.		
Ventilation	If mists are present in a confined space, provide adequate ventilation to control level below the permissible exposure limit.		
Protective Gloves	Oil resistant	Eye Protection	Use splash goggles or safety glasses when eye contact may occur.
Other Protective Clothing or Equipment	If there is a likelihood of oil splashing, an oil resistant apron should be worn to protect clothing.		

## SECTION 8: SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES

Precautions to be Taken in Handling and Storage	Normal precautions - keep away from flames, sparks or ignition sources. Do not weld, or use torch, on the container or near the container.
Other Precautions	Laundry oil soaked clothing before reuse.
Steps to be Taken in Case Material is Released or Spilled	Contain spill and keep from entering waterways or sewers. Absorb on porous inert material. Large quantities can be pumped.
Waste Disposal Methods	Dispose according to current Local, State and Federal regulations. Consider recycling.

The information in this MSDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

**KAESER**  
**COMPRESSORS**

Built for a lifetime.

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